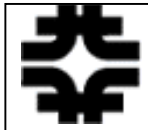

Non-US DØ Collaboration Issues

- Non-US representation in DØ
- Non-US contributions
- Foreign Funding Agencies Policy
- Summary

Non-US Institutes in RUN II

- Run I "Observation of the Top quark" 04/03/95 signed by 42 institutes among them 12 non-US institutes (~30%)
- Run II : 80 institutes 36 US and 44 non-US (~55%)

- Asia
  - China(2), India(3),Korea(1), Vietnam(1)
- Europe
  - Czech Republic(3), France(8), Germany(6), Ireland(1), Holland(2), Russia(5), Sweden(1),UK(3)
- America
  - Argentina(1), Brazil(3), Canada(1), Colombia(1), Ecuador(1), Mexico(1),

- in red countries in RUN I already
- in ( ) # of institutes
- manpower : Russia
- # institutes : France

Main non-US contributions

- **Detector operations**
  - Calorimeter
  - Forward Proton Detector
  - Muon detector
  - Silicon Vertex detector
- **Algorithms**
  - Trigger and Data quality
  - Calorimeter
  - Forward Proton Detector
  - Muon
  - Tracker
- **Computing**
  - 85% of MC production and 75% of data reprocessing Thanks to SAM Grid !
- **Physics analysis US/non-US = 50%/50%**

Evolution of the Foreign Manpower

- This table compares the evolution of the foreign manpower to the US manpower (HEPAP report)

Year	2005	2006	2007
Foreign	100%	93%	74%
US HEPAP	100%	88%	66%

- US/foreign in reasonnable agreement (within the accuracy ± 10%)

NON-US Funding Agencies Policy

- Important investment (money and manpower)
- Expect a rich harvest in physics results
- Excellent training ground provided to students
- Lure of LHC starting in 2006/2007
- Most of the commitments are currently until 2006/2007
- The strength of support beyond 2007 will depend on
  - The Tevatron luminosity
  - The status of LHC
  - But the transition to LHC shoud be "smooth" while keeping a very significant scientific production up to 2009 and beyond (support for students and postdocs)
- Assume that the Tevatron program will be completed end 2009
- The recent uncertainties with Tevatron run termination date is NOT HELPFUL !

Some examples (1)…

- **Germany**
  - *"very strong interest in continuing till 2007 at the current level then contribution lowered from 2008"*
- **UK**
  - *"strongly committed to DØ, believing in the physics potential of the Tevatron.. reduced support from 2007*
    PhD hired up to 2008 ..active up to the end of Run II"
- **France**
  - *" scientific contributions up to the end of Run II..with students and postdocs…reduced support from 2007"*
- **Holland**
  - *" committed up to 2006 then linear decline up to 2009"*
- **India**
  - *" The University of Delhi is committed to DØ till end 2007 and we are working towards getting support till 2009"*

Some examples(2) …

- **While some countries are committed up to the end of the Tevatron program without a decline in the support**
  - **Czech Republic** *" The financial resources for DØ activities are supported up to the end of 2008. Further financing is expected if the experiment continues"*
  - **Russia** *"Strong support till end of the experiment even if the end is beyond of 2009…The manpower will remain unchanged until collider is in operation"*

Comment :
Due to US visa concerns CERN could be more attractive for our colleagues from East Countries …

Summary

- DØ success depends on the strength of the non-US collaboration
- Strong commitments of the foreign funding agencies
- The rediscussion on the date of termination does not help in the foreign agencies support after 2007 and more generally could jeopardize the trust of foreign countries in any US HEP project in the future
- Manpower issue could be addressed by a smooth transition to LHC while keeping a significant scientific production